

Claims

1. A non-return valve having a valve housing (1) which defines an interior fluid passage (7) extending along the longitudinal axis (5) of such housing, having a seat element (17) situated in the passage (7) and defining a valve seat (31), and having a detent element (35) which is movable axially for movement against the closing force of a closing spring (45) in the passage (7) between a detent position adjoining the seat element (17) and opening positions raised above the valve seat (31) on the seat element (17) [sic], characterized in that the valve housing (1) forms a guide along which the seat element (17) may be displaced axially into different adjustment positions which correspond to the desired pretensioning of the closing spring (45) and accordingly to desired adjustments of the magnitude of the closing force of the closing spring (45).
2. The non-return valve as claimed in claim 1, wherein a displacement device (23, 27) actuatable from the exterior of the valve housing (1) is provided for control of the axial adjustment positions of the seat element (17).
3. The non-return valve as claimed in claim 1 or 2, wherein the interior wall of the valve housing (1) delimiting the passage (7) forms the guide for the displaceable seat element, which is in the form of an adjustment piston (17) which has a coaxial interior passage (29) the edge of which facing the detent element (35) forms the valve seat (31) for a detent element (35) having a valve cone (33).
4. The non-return valve as claimed in claims 2 and 3, wherein the wall of the valve housing (1) forming the guide of the adjustment piston (17) has at least one slot opening (21) which extends in the axial direction and through which extends a control pin (23) which is part of the displacement device and the interior end of which is seated in a radial hole

of the adjustment piston (17) and the exterior section of which projects from the exterior of the valve housing (1).

5. The non-return valve as claimed in claim 4, wherein the valve housing (1) has, in the area having the slot opening (21), an exterior threading for at least one positioning nut (27) belonging to the displacement device, which nut interacts with the section of the control pin (23) projecting from the valve housing (1) for adjustment of the axial position of the adjustment piston (17).
6. The non-return valve as claimed in claim 5, wherein two diametrically opposite slot openings (21) are provided in the valve housing (1) for two diametrically opposite control pins (23) of the displacement device.
7. The non-return valve as claimed in claim 6, wherein the displacement device has two positioning nuts (27) between which the outward projecting section of the control pins (23) is received.
8. The non-return valve as claimed in one of claims 1 to 7, wherein there is provided in the passage (7) of the valve housing (1) a guide element (37) with fluid passages and on which the detent element (35) is guided so as to be axially displaceable.
9. The non-return valve as claimed in claim 8, wherein the guide element (37) has a guide pin (39) which extends concentrically with the longitudinal axis (5) and which is introduced into a concentric blind hole (41) of the detent element (35), which hole is open on the end of the detent element (35) facing away from the valve cone (33) and wherein the blind hole (41) is of an axial length permitting displacement movement of the detent element (35) into corresponding open positions relative to the guide pin (39).

10. The non-return valve as claimed in claim 7 or 8, wherein there is provided as closing spring a helical compression spring (45) which is inserted between the guide element (37) and the detent element (35).
11. The non-return valve as claimed in claim 10, wherein the guide element (37) has, on the end opposite the guide pin (39), radially extending arms (43) which are provided for anchoring on the valve housing (1) and on which the facing end of the helical spring (45) is supported.